STUDIES IN THE EUPATORIEAE (ASTERACEAE). CCV.

TWO NEW SPECIES OF *MIKANIA* FROM BRASIL.

R. M. King and H. Robinson
Department of Botany
Smithsonian Institution, Washington, D.C., 20560

In a recent study (King & Robinson, 1980) eight new species of *Mikania* were described from Brasil. Two additional new species have been encountered since, and they are described below.

MIKANIA BISHOPII R. M. King & H. Robinson, sp. nov.

Plantae volubiles subglabrae. Caules fistulosi anguste 6-alati interdum spiraliter contorti minute sparse puberuli. Folia opposita, petiolis 1-2 cm longis anguste alatis; laminae ovatae vel oblongo-ovatae plerumque 6-10 cm longae et ca. 1.5-4.0 cm latae base rotundatae trinervatae vel tenuiter quinquenervatae margine integrae apice breviter anguste acuminatae supra et subtus glabrae non glanduliferae in nervis majoribus subtus perminute sparse puberulae, nervis tertialibus aliquantum regulariter transversalibus. Inflorescentiae thyrsoideo-paniculatae in ramis terminales vel axillares, ramis ultimis brevibus sparse puberulis vel subpilosis. Capitula in glomerulis paucicapitatis dense aggregata sessilia cylindrica ca. 7 mm alta et ca. 2 mm lata; bracteae subinvolucrales breviter lineares vel anguste oblongae ca. 2 mm longae et 0.4-0.7 mm latae glabrae vel subglabrae; bracteae involucri lineares vel anguste oblongae 5.5-6.0 mm longae ca. 1 mm latae base leniter gibbosae extus plerumque glabrae apice sensim minute puberulae obtusae. Corollae albae ca. 5 mm longae, tubis angustis ca. 2 mm longis glabris; faucibus anguste infundibularibus ca. 2.3 mm longis glabris, lobis breviter triangularibus ca. 0.9 mm longis et 0.7 mm latis margine dense puberulo-fimbriatis extus superne sparse puberulis intus superne sparse vel dense puberulis, pilis 1-3-septatis; filamenta in parte superiore anguste ca. 0.4 mm longa; thecae antherarum ca. 1 mm longae leniter fulvescentes; appendices antherarum ca. 0.3 mm longae et 0.18 mm latae; basi stylorum leniter incrassati glabri; rami stylorum lineares obtusi dense breviter papillosi. Achaenia prismatica ca. 2.8 mm longa 5-costata inferne glabra superne sparse puberula apice dense puberula; setae pappi ca. 40 uniseriatae plerumque 3.5-4.5 mm longae superne non latiores, cellulis apicalibus acutis. Grana pollinis in diametro 20-22 μm.

TYPE: BRASIL: Goias: 5 km NE to 5 km NW of Crystallina. elev. 2800-3200 ft. Vine in trees along creek, flowers white. Feb. 14, 1981. *R.M.King & L.E.Bishop 8967* (Holotype, UB; isotype, US).

The most distinctive features of *Mikania bishopii* are the wings on the stem and petioles and the hairs of the corolla lobes. The wings are narrow, but are particularly noticeable on twisted stems. The hairs on the corolla lobes are more prominent than any seen in other members of the genus, and they extend extensively onto the inner surface of the lobe. *Mikania smilacina* DC. has a similar habit, but wings are absent, the leaves are firmer with distinctly prominulous veins, the clusters of the inflorescence are denser, the corolla lobes have very few short hairs, and the tips of the pappus setae are broadened. The winged petioles of the new species recall *M. pteropoda*, but the latter has unwinged stems, non-acuminate more strongly trinervate leaves with serrulate margins, uncondensed racemose segments in the inflorescence, smaller heads with shorter corollas, hairless corolla lobes, and slightly broadened blunt tips on the pappus setae. Actual relationship of the new species may be closer to *M. glomerata* Spreng. and the questionably distinct *M. hookeriana* DC. which have no wings and only short marginal hairs on the corolla lobes.

MIKANIA KUBITZKII R. M. King & H. Robinson, sp. nov.

Plantae volubiles. Caules fistulosi teretes striati glabri. Folia opposita, petiolis angustis 1.0-3.5 cm longis; laminae ovatae vel oblongo-lanceolatae 4-14 cm longae at 1.5-5.5 cm latae base obtusae vel breviter acutae margine integrae apice argute breviter acuminatae utrinque glabrae fere ad basem valde trinervatae. Inflorescentiae generaliter laxe thyrsoideo-paniculatae in ramis pyramidaliter paniculatae sensim racemosae in nodis primariis vix alatae et plexi-ramosae, ramis minute sparse contorte puberulis, pedicellis 1-3 mm longis, bracteis subinvolucralibus basaliter insertis ca. 2 mm longis linearibus. Capitula cylindrica 6-8 mm alta et 1.5-2.0 mm lata; bracteae involucri oblongo-ellipticae ca. 6 mm longae et 1.5 mm latae apice rotundatae extus sparse perminute puberulae. Corollae albae? ca. 5 mm longae, tubis angustis 2.5 mm longis extus variabiliter glandulo-punctatis; faucibus anguste infundibularibus ca. 1.5 mm longis glabris, lobis oblongo-lanceolatis ca. 1 mm longis et 0.4 mm latis extus superne glandulo-punctatis margine irregulariter breviter papillosis; filamenta in parte superiore angusta ca. 0.35 mm longa; thecae antherarum ca. 0.8 mm longae virides in parietibus transversalibus et verticalibus cellularum late incrassatae; appendices antherarum subquadratae ca. 0.2 mm longae et latae apice rotundatae; scapi stylorum angusti glabri; rami stylorum in partibus stigmataceis et appendicibus inferioribus abaxialiter glandulo-punctati, appendicibus sensim angustioribus dense breviter papillosis. Achaenia prismatica ca. 3 mm longa 5-costata sparse minute puberula: setae pappi ca. 40 plerumque ca. 4.5 mm longae apice distincte leniter latiores, cellulis apicalibus obtusis. Grana pollinis in diametro 20-22 μm.

TYPE: BRASIL: Bahia: Município de Una. Estrada que liga BR 101 (São José) com BA 265, a 17 km da primeira. Cerca de 35 km ao S de Itabuna. Região de Mata Higrófila Sul Baiana. Cipó. Sept. 27, 1979. *S.A.Mori, T.S.dos Santos, K.Kubitzki & H.Poppendieck 12825* (Holotype, CEPEC; isotype, US).

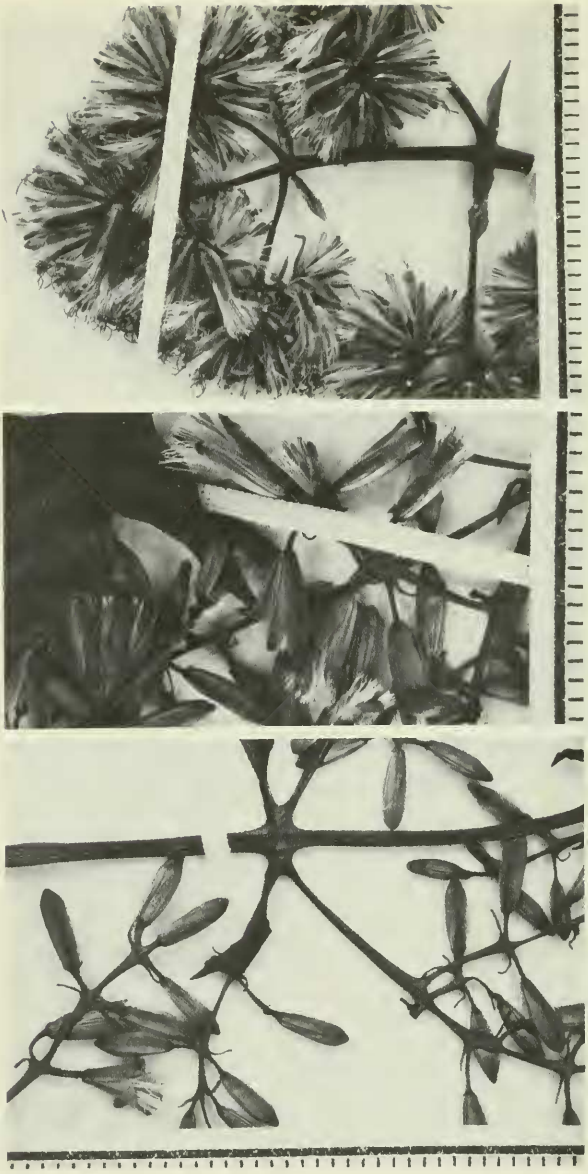
Mikania kubitzkii seems most closely related to *M. thyrsoidea* Baker which occurs farther south in southern Minas Gerais to Paraná, but the latter has smaller sessile heads and less well-developed nodal complexes in the inflorescence. Both *M. firmula* Baker and *M. duckei* Barroso from Bahia and Pernambuco are similar to the new species, but both also have sessile heads and the inflorescences have extensive spicate-racemose segments. All the above species, as well as the recently described *M. hagei* K.& R., have glands on the outer surface of the style branches, but only the new species has the appendages so reduced and tapering in comparison to the broad stigmatic region. The new species seems unique in the slightly winged nodal complexes formed at the primary nodes of the inflorescence where the first catadromus tertiary branch arises at the base of the secondary branch in an apparent 5-way branching. The branching pattern is weakly developed without any trace of a wing in *M. thyrsoidea*.

Literature Cited

King, R. M. and H. Robinson 1980. Studies in the Eupatorieae (Asteraceae). CLXXXVIII. New species of *Mikania* from Brasil. Phytologia 45 (2): 124-141.

Mikania bishopii R. M. King & H. Robinson, Holotype, Herbário Universidade de Brasília. Photos by Victor E. Krantz, Staff Photographer, National Museum of Natural History.

Mikania kubitzkii R. M. King & H. Robinson, Isotype, United States National Herbarium.



Top: *Mikania bishopii* enlargement of heads. Middle and Bottom: *M. kubitzkii* node of inflorescence and enlargements of heads.